FIG. 1

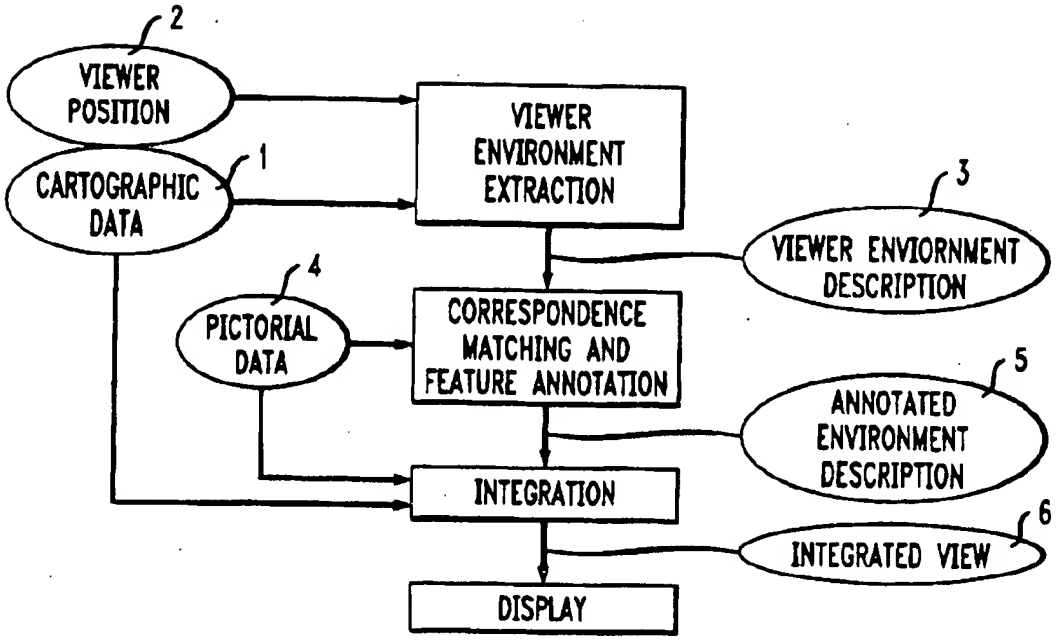

2
VIEWER POSITION
1
CARTOGRAPHIC DATA
VIEWER ENVIRONMENT EXTRACTION
3
VIEWER ENVIORNMENT DESCRIPTION
4
PICTORIAL DATA
CORRESPONDENCE MATCHING AND FEATURE ANNOTATION
5
ANNOTATED ENVIRONMENT DESCRIPTION
INTEGRATION
6
INTEGRATED VIEW
DISPLAY

FIG. 2

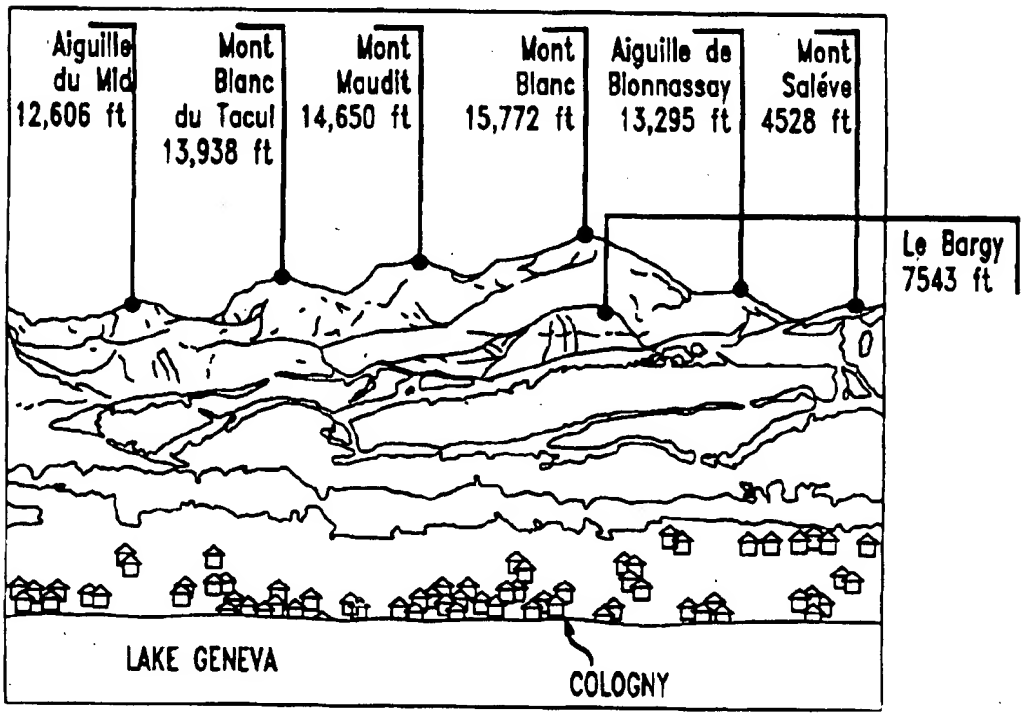

Aiguille du Mid 12,606 ft
Mont Blanc du Tacul 13,938 ft
Mont Maudit 14,650 ft
Mont Blanc 15,772 ft
Aiguille de Blonnassay 13,295 ft
Mont Saléve 4528 ft
Le Bargy 7543 ft
LAKE GENEVA
COLOGNY

FIG. 3

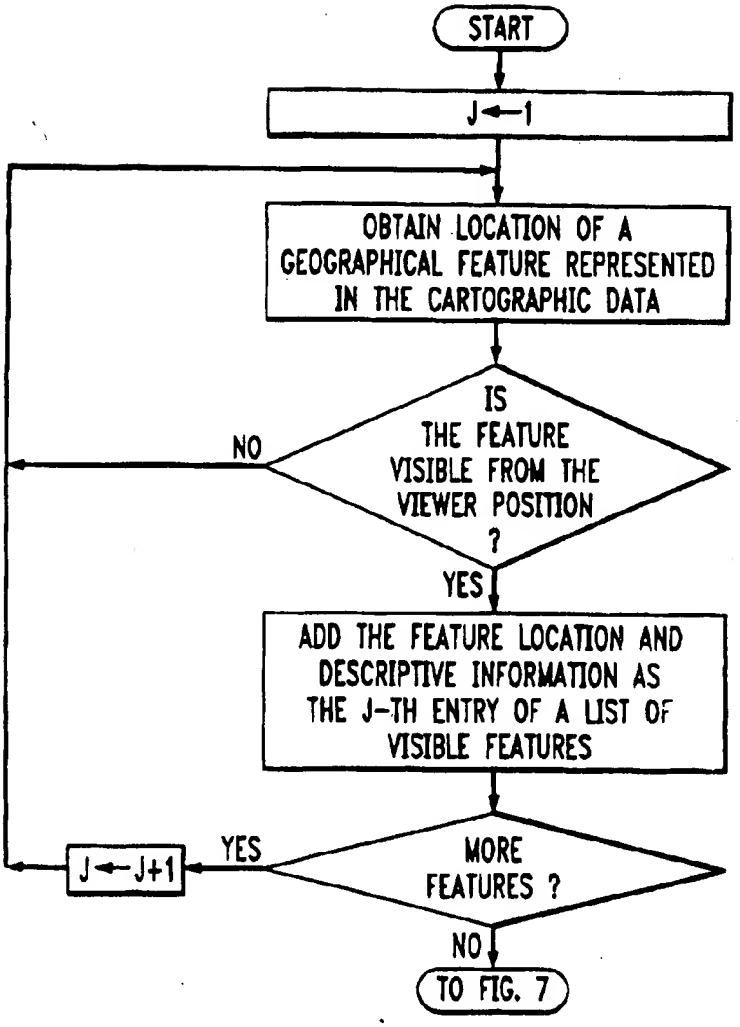

START
J←1
OBTAIN LOCATION OF A GEOGRAPHICAL FEATURE REPRESENTED IN THE CARTOGRAPHIC DATA
IS THE FEATURE VISIBLE FROM THE VIEWER POSITION ?
NO
YES
ADD THE FEATURE LOCATION AND DESCRIPTIVE INFORMATION AS THE J-TH ENTRY OF A LIST OF VISIBLE FEATURES
MORE FEATURES ?
YES
J←J+1
NO
TO FIG. 7

FIG. 4

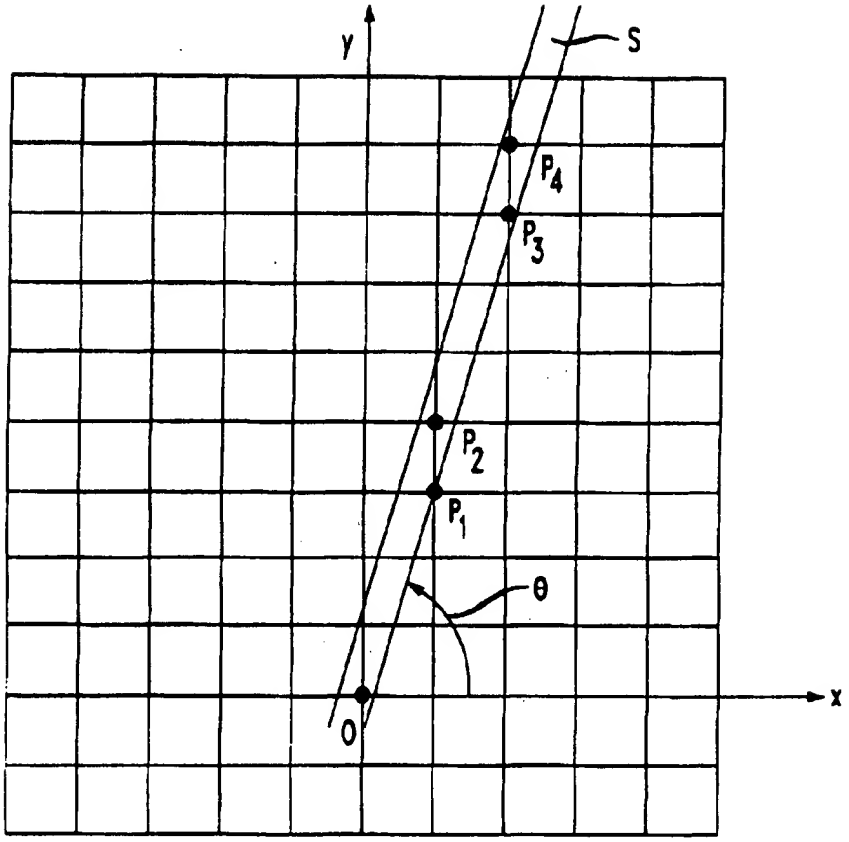


FIG. 5

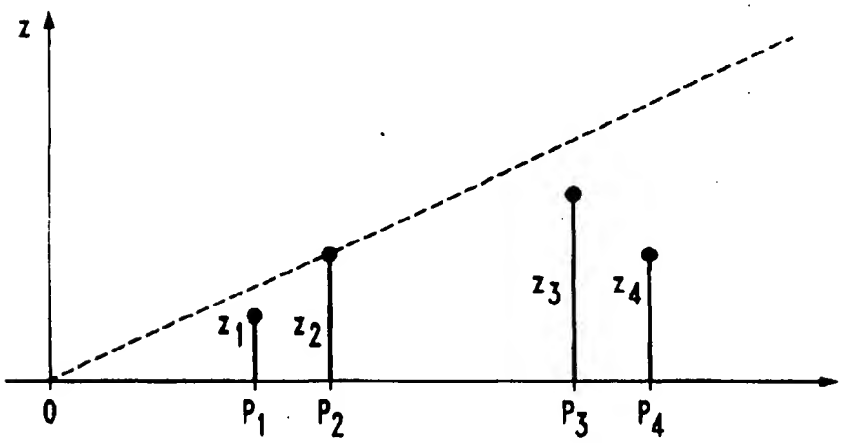


FIG. 6

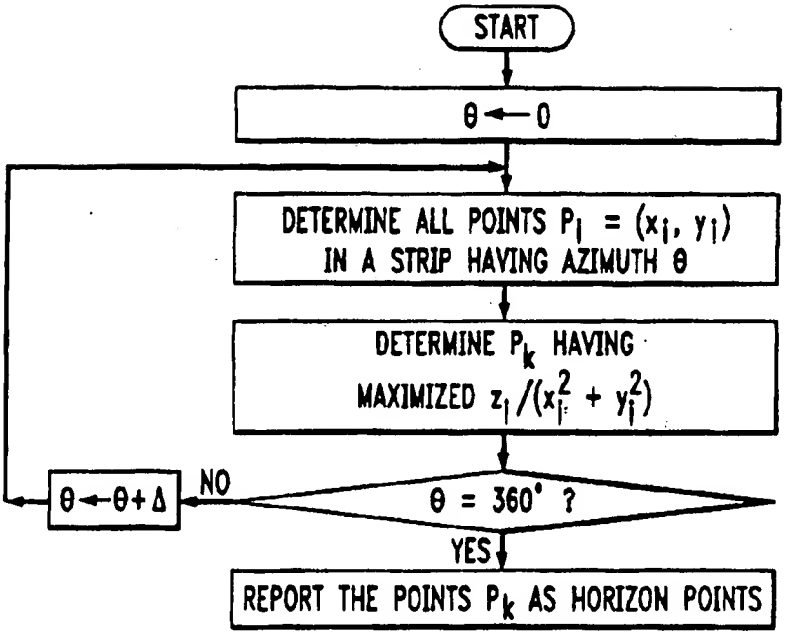
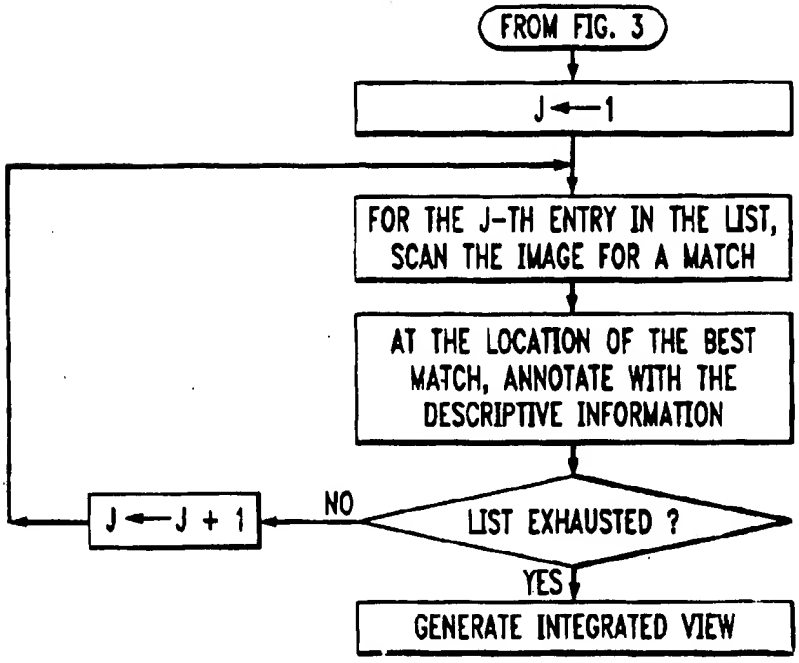

START
θ ← 0
DETERMINE ALL POINTS $P_i = (x_i, y_i)$ IN A STRIP HAVING AZIMUTH θ
DETERMINE P_k HAVING MAXIMIZED $z_i/(x_i^2 + y_i^2)$
θ = 360° ?
NO
θ ← θ + Δ
YES
REPORT THE POINTS P_k AS HORIZON POINTS

FIG. 7


FROM FIG. 3
J ← 1
FOR THE J-TH ENTRY IN THE LIST, SCAN THE IMAGE FOR A MATCH
AT THE LOCATION OF THE BEST MATCH, ANNOTATE WITH THE DESCRIPTIVE INFORMATION
LIST EXHAUSTED ?
NO
J ← J + 1
YES
GENERATE INTEGRATED VIEW

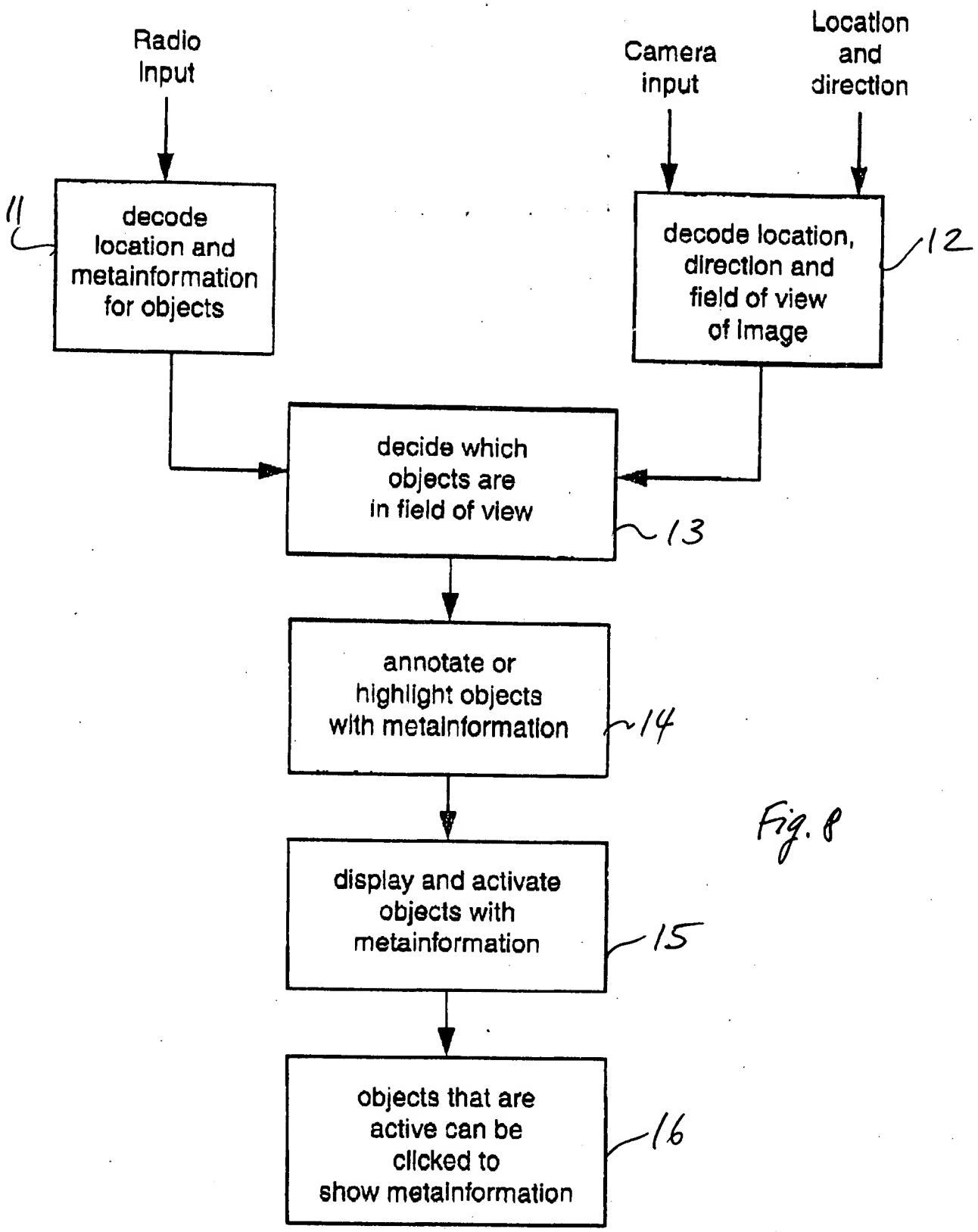

Radio Input
Camera input
Location and direction
11
decode location and metainformation for objects
decode location, direction and field of view of image
12
decide which objects are in field of view
13
annotate or highlight objects with metainformation
14
display and activate objects with metainformation
15
objects that are active can be clicked to show metainformation
16

Fig. 8

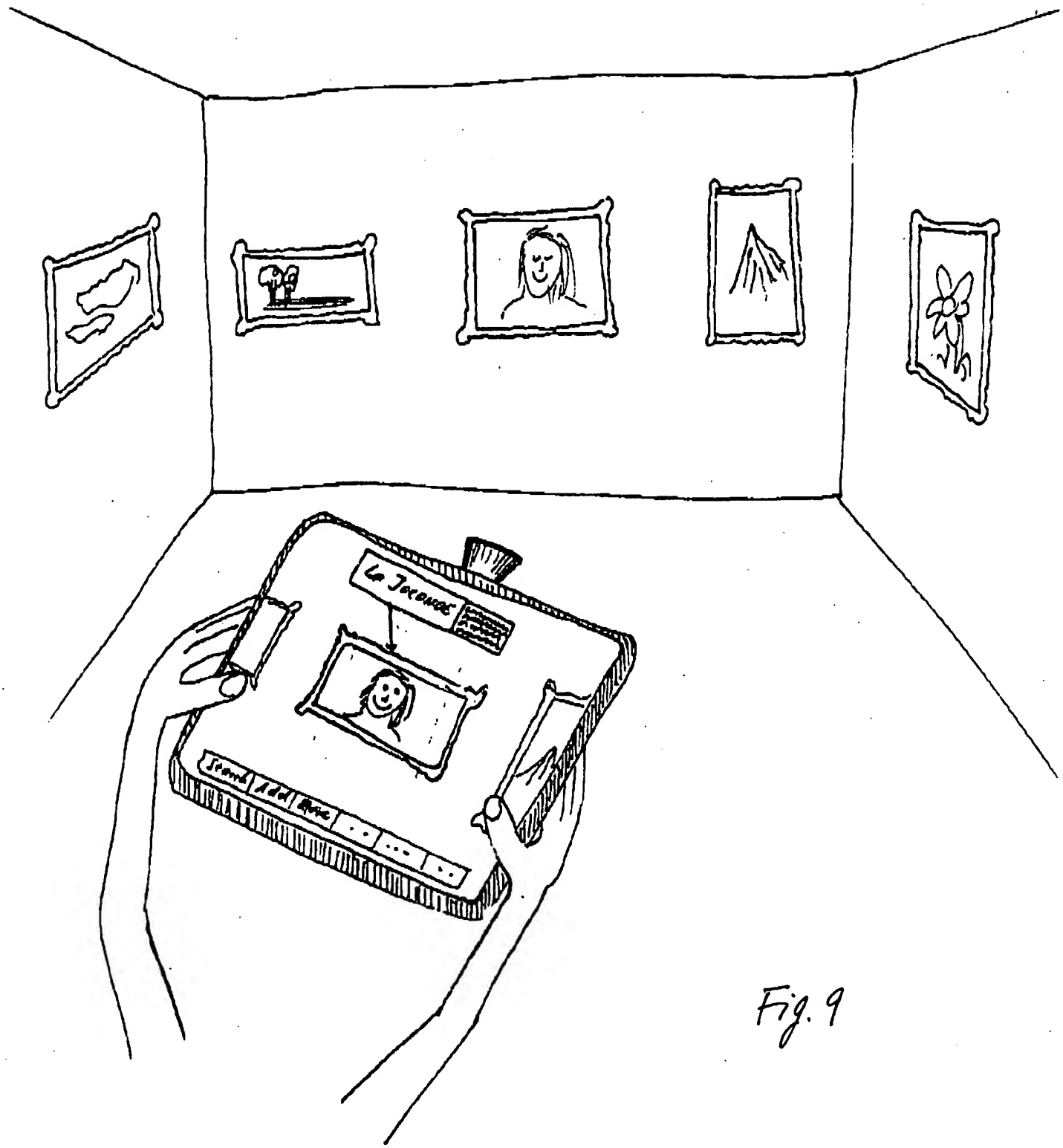


Fig. 9

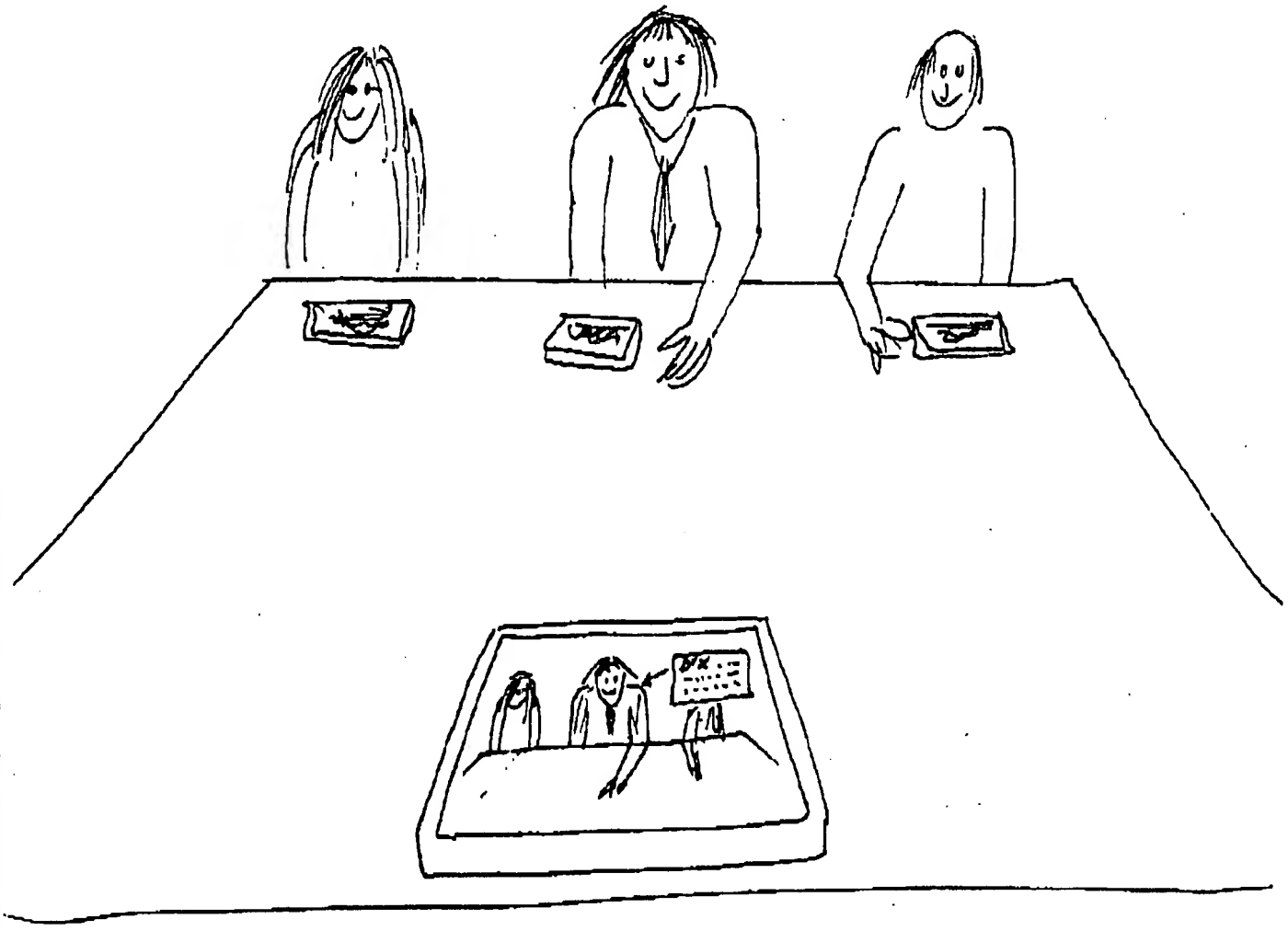


Fig. 10